19971121.ba v01_n786.bam.971121 v01_n787.bam.971121

>From ???@??? Sat Nov 22 10:25:03 1997
Message-Id: <199711210701.BAA00613@sco.theporch.com>
Date: Fri, 21 Nov 1997 01:01:38 CST
Subject: BOATANCHORS digest 1786

BOATANCHORS Digest 1786

Topics covered in this issue include:

1) FS: R-390 Receiver
by "Dale N. Richardson" <aa5xe@sat.net>
2) FS: Mil Radios
by "Dale N. Richardson" <aa5xe@sat.net>
3) McKay 167
by TIMOTHY.P.HAAKE@monsanto.com
4) Jap HRO,
by BEN NOCK <G4BXD@compuserve.com> (by way of Andre Guibert <aguibert@sympatico.ca>)
5) FS: Manuals
by "Steven K. Wenger" <swenger@csj.net>
6) Re: Excessive Meter Bounce - KWM-380
by 4CX250B@miavx1.acs.muohio.edu
7) AM VS. DSB
by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
8) SELENIUM RECTIFIERS
by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
9) W4QBE needs MIL HRO info
by "Ray L. Mote" <rmote@rain.org>
10) Re: SELENIUM RECTIFIERS
by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
11) RME-45B Vernier
by "Tony J. Schroeder" <tony@bright.net>
12) Crystals
by Richard Pekelney <pekelney@rspeng.com>
13) Converted CBs on Ten
by "Tony J. Schroeder" <tony@bright.net>
14) Re: Converted CBs on Ten
by Larry Asp <larry.asp@sympatico.ca>
15) Schematic needed TBY-2
by Tom Norris <badger@telalink.net>
16) Moore's 4th
by "Lawrence R. Ware" <lrware@pipeline.com>
17) RE: AM Repeaters
by "Ornitz, Barry L" <ornitz@eastman.com>
18) WTB: Eico 730 cover
by "Grant Youngman" <nq5t@gte.net>

19) Re: Snobs, Subracos and 10AM
by John Ward <ke2st@frontiernet.net>
20) Photos of National RCE Airways Receiver.
by arc5@ix.netcom.com
21) Cleanup Suggestions Needed
by ARONGV@aol.com
22) Radio Station NSS, Annapolis, Md.
by Jeffrey Herman <jeffreyh@hawaii.edu>
23) Re: AM VS DSB
by "ROBERT W DOWNS, WA5CAB" <RWDowns_WA5CAB@compuserve.com>
24) Any BAs in Las Vegas?
by Hannelore Breuer <hbreuer@metronet.de>
25) Serious Code Practice
by Dick Dillman <ddillman@igc.apc.org>
26) EIMAC POWER AMP TUBE MANUALS on Ebay
by arc5@ix.netcom.com

Date: Thu, 20 Nov 1997 20:29:57 +0000
From: "Dale N. Richardson" <aa5xe@sat.net>
To: boatanchors <boatanchors@sco.theporch.com>
Subject: FS: R-390 Receiver
Message-ID: <34749DC3.A50F4C05@sat.net>

Hello BA'ites,
I need to reduce the size of my collection somewhat so I am offering for sale a R-390 receiver. Mfg by Motorola. Used by ASA (ASA markings in rear). Has both meters and top cover. Bottom cover is missing. No modifications. Good working condition. Cosmetically an 8. Paint on front panel is worn off around tuning knobs and there is a red splotch of paint above nameplate data. Has power cable with right connector. $350...Pick up only. Will consider delivery within 250 miles of Junction, TX.

PARTS R-390--Mfd by Collins, missing xtal osc. T-208 is bad in RF unit. IF and Power supply are very clean but minus tubes. Gear train is good. Will sell by chassis or altogether for $150.
Make an offer for each chassis. Will ship chassis but prefer pickup for all of it.

I can be contacted at (915) 446-4607 or email: aa5xe@sat.net

Thanks es 73,

Dale AA5XE

--

Dale N. Richardson AA5XE
email aa5xe@sat.net
http://www.sat.net/~aa5xe

Date: Thu, 20 Nov 1997 20:30:21 +0000
From: "Dale N. Richardson" <aa5xe@sat.net>
To: boatanchors <boatanchors@sco.theporch.com>
Subject: FS: Mil Radios
Message-ID: <34749DDB.B226D8D7@sat.net>

Have 3 military WWII receivers excess to my needs.

1. Radio Receiver BC-224-F Belmont Radio Corp. 200kc-18Mc. 115v power supply. Excellent condition. Cosmetically a 9.5 (some wear on knobs and faceplate). Works good.
$150 plus shipping

2. BC-342-N designed by Signal Corps, Ft Monmouth NJ and built by Farnsworth Television and Radio Co under order No. 12220-Phila-43. 1500 kc-18Mc. very heavy receiver. Precision vernier tuning. Cosmetically a 9.9 (bottom of case has scratches). 115v power supply. $200 plus shipping.

3. BC-348 Q Good condition, works fine, cosmetically a 6.5 or 7. 115v power supply. $80 plus shipping.

I can be contacted at (915) 446-4607 or email at aa5xe@sat.net. Will consider trade for 6 meter equipment and all offers.

Tnx es 73,
Dale AA5XE

--
Dale N. Richardson AA5XE
email aa5xe@sat.net
http://www.sat.net/~aa5xe

Date: 20 Nov 1997 14:38:29 -0600
From: TIMOTHY.P.HAAKE@monsanto.com

To: boatanchors@sco.theporch.com
Subject: McKay 167
Message-ID: <"1120203928-McKay 167"@MHS>

Gang,

Does anyone know and hopefully have any information on the Federal Radio McKay 167 transmitter? The McKay 167 transmitter is one of three cabinets that made up an LF and MF system that was used on Liberty ships during the war. I suppose most of them found home at the bottom of the ocean thanks to DAS BOUT. So if any of you think you "really" have a boatanchor, well then you'd better look at mine first.

I have about half of one that I have been working on for sometime now. I found a picture or two of one in the ads of a 48' QST. Mine was missing alot of sheet metal and I have it all replaced based on that one photo! I think I am close enough that most won't know the difference. I'd still like more reference though.

The McKay stands about 6 1/2 ft tall and about 30" wide. It is fully metered across the top, has a small counter top for a key, log book, etc. and a built in but removeable single conversion receiver. The transmitter tunes 2-16mc I beleive and runs a pair of 813s. It was intended for CW only and had no modulator. I have a commerical built modulator with 811s and power supplies installed in the base of the unit which I believe is where the motor-generator unit sat at one time.

My plan is to finish it out so cosmetically it looks like it is looking for a torpedo in it's original configuration but run it AM too.

Any info would sure help.

Tim WA0TSY
Timothy.P.Haake@Monsanto.com

Date: Thu, 20 Nov 1997 15:44:14 -0500 (EST)
From: BEN NOCK <G4BXD@compuserve.com> (by way of Andre Guibert <aguibert@sympatico.ca>)
To: boatanchors@theporch.com
Subject: Jap HRO,
Message-ID: <199711202044.PAA04774@smtp2.sympatico.ca>

Ben wrote: As my set was personally
carried from Japan, etc etc

Ben
Does it have Jap or American tube line up?
What about the P/S
Andre
What a Bikini shows is good, what it hide
is even bether!!

Date: Thu, 20 Nov 1997 15:40:52 -0600 (CST)
From: "Steven K. Wenger" <swenger@csj.net>
To: Boatanchors <boatanchors@theporch.com>
Subject: FS: Manuals
Message-ID: <Pine.LNX.3.93.971120152239.10261A-100000@lisa.csj.net>

Greetings,

I have the following manuals for sale:
1. Johnson Ranger ll - original, very good condition $15
2. Johnson Ranger ll - original, front and rear cover missing $10
3. National NC-300 - HI Manuals copy $10
4. Collins 75A3 - HI Manuals copy $10
5. Knight-Kit T-50 - original $10
6. TM 11-665 Army Technical Manual $15
7. Operator's Manual for AN/GRC-26A, 26B, and 26C $15
8. Central Electronics 600L - original $10
9. ART-13 - copy $15

All prices plus shipping.

73,
Steve KA9QLF

Date: Thu, 20 Nov 1997 15:51:26 -0500
From: 4CX250B@miavx1.acs.muohio.edu
To: boatanchors@theporch.com
Subject: Re: Excessive Meter Bounce - KWM-380
Message-ID: <v03102804b09a51746ad9@[134.53.5.143]>

>Could the meter movement be bad?? Or is there a low pass or peak
>detecting circuit connected with the meter in some way that may have
>failed??
>

>regards
>--dave (W5DT)
>

Dave,

The KWM-380 uses a hang AGC, which means that the S-meter should rise quickly to the peak value of a station, and then "hang" at the peak value until the time constant (fast/medium/slow) expires, at which time the needle should rapidly drop to zero (assuming that the station has stopped transmitting during the interim). In other words, the hang AGC opens the receiver gain very quickly, in contrast to conventional AGC circuits, in which the meter slowly decays downward after reaching it's peak value (corresponding to a slow recovery of receiver gain).

For reasons I've never understood, hang AGC circuits are not very common. I think they're greatly to be preferred, but the circuit complexity is greater and they're more expensive to implement.

If your S-meter is bouncing around, then it probably signifies a defective meter which has somehow lost its internal damping. Sorry.

73,

Jim Garland W8ZR

Date: Thu, 20 Nov 1997 15:54:08 -0500 (EST)
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
To: boatanchors@theporch.com
Subject: AM VS. DSB

Message-ID: <9711201554.aa03623@pcusa01.ecunet.org>

> From: "Grant Youngman" <nq5t@gte.net>

> > DSB (no carrier) will not sound right unless the reinsterted carrier
> (from > the rx's BFO) supplies the correct frequency AND the correct
> phase of the > missing carrier.

> Well.... yes and no. If you are listening to DSB(SC) at a
> relatively wide bandwidth with the BFO centered in the passband,
> this is true.

I assumed that you'd be receiving both sidebands of the DSB sig.

What actually happens if your receiver is not phase-locked to the ow-missing carrier of the DSB signal is this: As the receiver-re-inserted carrier (BFO) drifts in phase (let's assume it's very close in frequency) to the missing carrier, the detector will see anything from pure amplitude modulation to phase modulation & everything in between (a combination of AM & PM).

That's what gives the detected audio its changing, phasey, spacey sound.

You can get some of the same effect by listening to an SW, skywave-propagated signal using in independent sideband receiver & stereo headphones. You feed the detected lower sideband audio to one ear & upper to the other.

> In the dark past (oh, 1960 or so), I built a high level DSB kluge of
> a transmitter using a pair of 6146's and other stuff laying (total
> incremental cash outlay -- exactly $0.00). Ran it for a year or so
> and never had anyone notice that I wasn't on an SSB rig. ....

Has the same bandwidth as an equivalent AM sig but produces no hetrodynes. And by inverting the speech spectrum, even a crummy (poor selectivity) SSB receiver could successfully demodulate the signal. It is essential that only one sideband reaches the detector. CQ ran an art on how to do this somewhere around 1963.

-John Sehring (Thu, Nov 20, 1997 10:26 am MT @Baker, Montana) UCC WB2EQG

Date: Thu, 20 Nov 1997 15:54:08 -0500 (EST)
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
To: boatanchors@theporch.com
Subject: SELENIUM RECTIFIERS
Message-ID: <9711201554.aa03626@pcusa01.ecunet.org>

I assume that a selenium rectifier has a certain constant internal resistance, just like any rectifier, tube or silcon.

So when changing to a rectifier with a lower internal resistance means simply having to add some resistance in series with it to restore original output voltage under the original load current.

That load current could be while the equipment is idle or running full bore, just so you get back to the original voltage.

Whether the ps is only charging the filter caps or delivering max current, the series resistance of the rectifiers is always present, producing some I squared R loss.

With the correct resistor, both no-load and full-load ps voltages will be the same as before.

The series resistor/replacement diode combo will dissipate just about the same amount of power (heat) as the selenium it replaced. So net heat due to ps losses will be the same.

-John Sehring (Thu, Nov 20, 1997 10:39 am MT @Baker, Montana) UCC WB2EQG

Date: Thu, 20 Nov 1997 13:08:53 -0800 (PST)
From: "Ray L. Mote" <rmote@rain.org>
To: Boatanchors <boatanchors@sco.theporch.com>
Subject: W4QBE needs MIL HRO info
Message-ID: <Pine.SUN.3.96.971120130505.11101C-100000@coyote.rain.org>

Got the following letter today:

"Dear Ray,

Hank Brown, W6DJX informs me you may have some info on the R-459/UR receiver. It is a National and has a dial like a HRO and plug-in tuning units.

Please let me know and your charge for info or a copy.

73,
Charles R. Lackey, W4QBE
HC10, Box 567
Lakemont, GA 30552

I can't help him, since I sold all my manuals/lists. If you can shed any light on this receiver, please contact him at the address shown above.

73....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

Date: 20 Nov 1997 15:37:18 -0600
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>
To: boatanchors@sco.theporch.com
Subject: Re: SELENIUM RECTIFIERS
Message-ID: <1997Nov20.153718-0600@spike.vuse.vanderbilt.edu>

In <9711201554.aa03626@pcusa01.ecunet.org>, JOHN SEHRING wrote:
>I assume that a selenium rectifier has a certain constant internal
>resistance, just like any rectifier, tube or silcon.
>
Well, strictly speaking that statement is correct, but it isn't quite right. Neither tube nor silicon rectifiers have a constant internal resistance. Sand state rectifiers are worse than tubes in this respect (once you get up to a certain amount of current, there is a nearly constant voltage drop regardless of current). Selenium rectifiers are likewise non-ohmic devices, but are fairly linear compared with silicon.

>So when changing to a rectifier with a lower internal resistance
>means simply having to add some resistance in series with it to
>restore original output voltage under the original load current.
>

That's a good approximation.

>That load current could be while the equipment is idle or running full
>bore, just so you get back to the original voltage.
>
That's not quite right. I believe that you would be more secure to check your voltage under both conditions.

A. B. Bonds

Date: Thu, 20 Nov 97 16:50:23 EST

From: "Tony J. Schroeder" <tony@bright.net>
To: boatanchors@theporch.com
Subject: RME-45B Vernier
Message-ID: <71857.tony@bright.net>

I found a nice RME-45B at Dayton this year, and its turn at the bench has finally arrived. This is the model with two-speed tuning via an inner and outer knob. Unfortunately, the inner knob and shaft were not attached to the tuning mechanism when I bought the set.

Before tackling the disassembly of the front panel, could someone offer me a hint or kink on how to fix the knob? I can see that the inside of the inner knob shaft is threaded, but the threads don't "bite" on anything when inserted into the outer knob shaft.

I'd appreciate any help offered. BTW, I remember that a fine discussion of Hank Van Cleef's repairs and modifications to a 45B were on the list sometime ago; anyone know in what Digest(s) this discussion took place?

TNX es 73,

Tony Schroeder, N8SNC
tony@bright.net

AMI# 786

Date: Thu, 20 Nov 1997 15:09:40 -0700
From: Richard Pekelney <pekelney@rspeng.com>
To: boatanchors@theporch.com
Subject: Crystals
Message-ID: <v03102800b09a637f14a5@[207.181.197.17]>

Folks,

After some additional research it appears that USS Pampanito had its AN/ARC-4 VHF radio removed sometime after Jan of 1945 and replaced with an SCR-522 (SCR-624B in the boxes...). We have a possible donor of the radio, but we will need Crystals to operate it. They are crystal Types DC-11 or CR-1A, the two crystal types can be mixed. Rcvr 8272.5 kc, Xmtr 8020.0 kc

The choice of frequency is designed to match the operating frequency of 144.360 mc for which we have crystals in a working AN/ARC-4 (WE type 703A). If we cannot get these frequencies for the SCR-624B, we will look for two matched sets of crystals for either two SCR-624Bs, or one SCR-624B and one

AN/ARC-4 in the ham bands. (These are the AM VHF radios available to us.)

Any help in finding the crystals would be greatly appreciated. More information about USS Pampanito may be found at www.maritime.org/pamphome.shtml, and specificaly on the boatanchors at www.maritime.org/radiocat.htm. Pictures of the DC-11 and CR-1A crystals may be found at www.maritime.org/wish-crystal.htm.

Thank you once again for the all the help.

rich

--
Richard Pekelney
Internet: pekelney@rspeng.com
Phone: USA 1-415-563-5928
Fax: USA 1-415-563-5787

Date: Thu, 20 Nov 97 17:12:09 EST
From: "Tony J. Schroeder" <tony@bright.net>
To: boatanchors@theporch.com
Subject: Converted CBs on Ten
Message-ID: <73073.tony@bright.net>

I thoroughly enjoyed reading Michael, AB5l's post about not admitting to using a converted CB on 10 meter AM. Of course, his posts are always fun to read, so this was no exception!

Anyhow, it's funny that we came to this thread, as I somehow wound up with two tube-type Tram CBs, a Titan and Titan II. The Titan II even has markings on the panel for sideband operation, yea! Do any of my fellow listmembers have experience with converting these units, or is there a generic procedure to be followed in doing same, regardless of manufacturer?

Thanks for any help provided. I hope to see you on Ten!

73,

Tony Schroeder, N8SNC
tony@bright.net
AMI# 786

Date: Thu, 20 Nov 1997 17:33:52 -0500
From: Larry Asp <larry.asp@sympatico.ca>
To: tony@bright.net
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Converted CBs on Ten
Message-ID: <3474BAD0.3037@sympatico.ca>

Tony J. Schroeder wrote:
>
> I thoroughly enjoyed reading Michael, AB5l's post about not admitting to
> using a converted CB on 10 meter AM. Of course, his posts are always fun to
> read, so this was no exception!
>
> Anyhow, it's funny that we came to this thread, as I somehow wound up with
> two tube-type Tram CBs, a Titan and Titan II. The Titan II even has
> markings on the panel for sideband operation, yea! Do any of my fellow
> listmembers have experience with converting these units, or is there a
> generic procedure to be followed in doing same, regardless of manufacturer?
>
> Thanks for any help provided. I hope to see you on Ten!
>
> 73,
>
> Tony Schroeder, N8SNC
> tony@bright.net
> AMI# 786

Hey Ive got a converted CB converted 15 yrs ago to the ARRL 10 meter band plan, a project of the Vancouver BC ham radio club who beleived the only good use for a CB rig was to convert it to 10 meters. Great QRP AM rig, and I worked lots of AMers then with it. Might be fun to try again.

Date: Thu, 20 Nov 1997 17:03:01 -0600
From: Tom Norris <badger@telalink.net>
To: (Recipient list suppressed)
Subject: Schematic needed TBY-2
Message-ID: <3.0.3.32.19971120170301.0071e548@telalink.net>

Need a schematic for the TBY-2.

I ran across one the other day -- and yes, the first thing I did was get out the counter and measure its radioactivity -- .9 mR/hr right at the meter, right around .07 mR per hour (barely above background here) over the rest of the front panel. I thought all these things were supposed to be hot?

Heck, my 390A meters measure a bit over .5 mR/hr at 1/2 inch.

Survey instrument recently calibrated so these readings are correct.
(Anyone needs theirs calibrated, email me. I have NIST traceable
facilities available. Free.)

73

Tom
(Prefer a scanned schematic emailed if possible.)

Date: Thu, 20 Nov 1997 18:05:28 +0000
From: "Lawrence R. Ware" <lrware@pipeline.com>
To: baswaplist@foothill.net, boatanchors@sco.theporch.com
Cc: n6pww@gte.net
Subject: Moore's 4th
Message-ID: <3.0.32.19971120175825.006f29cc@pop.pipeline.com>

At 09:21 11/20/1997 -0800, it was written:
>Lawrence.
>
>Could you expound on Moore's 4th - Is that a BA type book? I am not >familiar
with it - if it is where might one obtain one?

With the 2nd request in one day, it appears a very short book review
might be in order... :-)

Title: Communications Receivers, The Vacuum Tube Era: 1932-1981. 4th Ed.
Author: Raymond S. Moore
RSM Communications, La Belle, FL USA
ISBN 0-9618882-4-5

Available from finer book dealers of the BA persuasion, like
W7FG Vintage Manuals, AES, ARC, etc.
About $20 + shipping.
Ask for the 4th, some places still have only the 3rd edition in stock!

136 pages of pictures, tube lineups, descriptions, years made, etc.
etc. etc. for BA Receiver fans of all kinds.

I've never met Ray Moore even though we live in the same state, but
based on his books, I think I'd like him a lot. Every edition gets
better and better. The 4th has greatly improved photographs of

many of the radios, and at least in the National section at least 7 new models. He has also corrected a couple of minor errors concerning the CAA "AGR" series.

>From "Allied" to "Western Electric" with a greatly expanded military section in the middle, Larry rates it:
4+ PW dials, a must buy! :-)

# Larry Ware
# Admirer, Collector, Restorer of National Radio Company
# receivers and other artifacts.
# Orlando, Florida
# lrware@pipeline.com

Date: Thu, 20 Nov 1997 18:50:32 -0500
From: "Ornitz, Barry L" <ornitz@eastman.com>
To: "'boatanchors@sco.theporch.com'" <boatanchors@sco.theporch.com>
Cc: "'JOHN_SEHRING.parti@ecunet.org'" <JOHN_SEHRING.parti@ecunet.org>
Subject: RE: AM Repeaters
Message-ID: <c=US%a=_%p=Eastman%l=NTD150-971120235032Z-23274@ntd150.kpt.emn.com>

John Sehring, WB2EQG, wrote about 10M AM repeaters and mentioned the 29.53/29.63 machine of WB4AFP & N4JK. This machine was actually in nearby Anderson, SC. But, it was not EXACTLY a true AM repeater. To eliminate many of the problems with AM repeaters, this machine had an FM input with AM output. No duplexers were used. Instead the receivers were located remotely from the transmitter with a 440 link carrying the audio. The idea behind this repeater was the availability of inexpensive CB rigs. It is pretty trivial to convert an AM transmitter to a FM transmitter. In the HyGain CB radios of the time, the modulator was disconnected from the final transistor and audio from the modulators driver stage was applied to a varactor diode across one of the crystal oscillators. Similar modifications can be done to virtually any vacuum tube AM rig.

Receiving FM, however, was much more difficult, at least in those days. Modern integrated circuit chips have made the job easy today, but in keeping with the Boatanchor spirit, a limiter stage and Foster-Seely discriminator would be needed to add to the typical boatanchor receiver to receive FM.

So Art and Dave made life easy on the local hams. The only FM receivers required were those serving the repeater (they used multiple receivers and signal-strength voting). The repeater transmitter was AM so it could be cheaply received by the converted CB receivers, or any other AM receiver.

In areas where there is sufficient 6M AM activity, such a repeater would be ideal. You would gain most of the benefits of FM on the uplink, yet because the repeater output is generally high-powered at a good site, a good, clean AM transmitter would give wonderful results on the downlink. With the transmitter being AM, and the repeater receiver FM, some of the problems with duplexers and such might be simplified.

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

Date: Thu, 20 Nov 1997 18:21:05 -0500
From: "Grant Youngman" <nq5t@gte.net>
To: boatanchors@theporch.com, baswaplist@foothill.net
Subject: WTB: Eico 730 cover
Message-ID: <199711210025.SAA13045@smtp1.mailsrvcs.net>

I'm looking for the perforated metal cover for an Eico 730 modulator. Paint condition is not terribly important as long as it is still nice and rectangular :-)

So if you have a 730 junker with cover, or just a cover drop me a note and a suggestion for appropriate remuneration ...

Thanks ...
Grant/NQ5T

Grant Youngman / NQ5T

nq5t@gte.net
BA pics at http://home1.gte.net/nq5t
Double Oak, TX -- nr Dallas

Date: Thu, 20 Nov 1997 22:23:17 -0500
From: John Ward <ke2st@frontiernet.net>
To: <boatanchors@theporch.com>
Subject: Re: Snobs, Subracos and 10AM
Message-ID: <199711210323.WAA55646@node21.frontiernet.net>

MNHopkins wrote:

>1. Never admit you are using a converted CB
>
>2.   Take #1 to mean v. tube CBs too
>
>3.   Lie to facilitate #s 1 and 2

That's a 10-4 there dumb buddy, thanks fer the ad-vice. We're runnin one o' them Ranger one's here too, with a Power Mike an' re-verrrrbbbb. Well gotta go, catch ya on the flip-flop.

(What gave me away, somethin' I said)?

I'll never modify a seebeee for 10. Not that it's a bad idea, I just don't like working on them. But if you answer my CQ with a Hy-Gain or a Collins, no matter. I'll talk to you with pleasure. Variety's the fun of hammin'.

John, KE2ST, who's gonna go dig out his Ranger

Date: Thu, 20 Nov 1997 21:37:18 -0600 (CST)
From: arc5@ix.netcom.com
To: boatanchors@sco.theporch.com
Subject: Photos of National RCE Airways Receiver.
Message-ID: <199711202136459894@>

Anyone interested in the National NC-100-type Airways receivers can see photos of my very nice 1937 model RCE at:

http://pw1.netcom.com/~arc5/rce.jpg

and

http://pw1.netcom.com/~arc5/rceundr.jpg

Nomenclature plates say:
(small tag 1, above tag 2)

```
              CONTRACTOR
WESTINGHOUSE ELECTRIC AND MANUFACTURING CO.
     ORDER # 38-2833 DATE OCT 1, 1937
```

(tag 2)

```
     COMMUNICATION RECEIVER
           MADE FOR
     DEPARTMENT OF AIR COMMERCE
     TYPE RCE      ORDER (blank)
```

SERIAL # 187
NATIONAL COMPANY, INC.
MALDEN, MASS

I'll probably be offering this rig for sale in the near future.

73 DE Dave Stinson AB5S
arc5@ix.netcom.com

Date: Thu, 20 Nov 1997 23:38:39 -0500 (EST)
From: ARONGV@aol.com
To: boatanchors@theporch.com
Subject: Cleanup Suggestions Needed
Message-ID: <971120233839_631641622@mrin41.mail.aol.com>

Hi Gang:

Before I get started on my project question, I have a Globe Scout 680A that's working but in serious need of TLC (panel great, cabinet bad). Anybody interested, you can have it but it's heavy so I need $15-$20 to ship it.

Same deal on a Heathkit DX-60. Cabinet cover already blasted. Free but I need about $10-15 for shipping. locals can save me the trouble and pick them up free.

Okay, now to the dirty work. Finally got around to checking out an old project, an NC-183D. Front looks like a dream rig, perfecto!

Opened the lid and I remember the guy who sent it to me saying something like, "There's some strange discoloration on the chassis."

Well, it turns out that a rather large family of mice used this beauty for their BA bathroom. So my question is, how the heck do I get this mouse urine and crap off the chassis? You wouldn't believe how much of it there is.

Being sure to give it a thorough inspection above and under the chassis, I discovered small strands of Christmas tensil through the wiring on the bottom, not much above the chassis. For those who fearlessly plug in BA stuff without checking the innards first, can you imagine what a fireworks show I would have had if I hadn't spent an hour with tweezers removing the mice Christmas leftovers?

On the two units for free, see me at ARONGV@aol.com. Don't know, but some guys may want to see the answer to this mouse in the box NC-183D question right here on this list (eh, Jack?).

Also, we're just around the corner from my annual Thanksgiving "Manuals For Postage" gig, so you've been warned. And, I'll be as tough as Jack if the few, simple rules I require aren't followed, as this creates a blizzard of E-mail for me.

If you miss it, the next one will come at Christmas time. with that list, I'll include more free for postage equipment.

73s Ron W0OIZ
Kansas City

Date: Thu, 20 Nov 1997 19:32:56 -1000
From: Jeffrey Herman <jeffreyh@hawaii.edu>
To: boatanchors@theporch.com, boatanchors@listserv.tempe.gov
Subject: Radio Station NSS, Annapolis, Md.
Message-ID: <97Nov20.193259hwt.188963(7)@uhunix5.its.Hawaii.Edu>

Please contact k6dc@aol.com - I'm only the messenger! Jeff KH2PZ

ATTENTION FORMER "SHIPMATES," RADIO NSS,   ANNAPOLIS, MD:
Please check out NSS WEBPAGE:

http://members.aol.com/k6dc/nss.html

Any comments are welcome. If you were stationed there, Navy, Marine, or civilian, before or after World War 2 we would like to hear from you. If you care to post your rememberances and/or a photo for all to see, send to:

Merle B. Parten-K6DC, 930 Alston Road, Santa Barbara, CA 93108-2312
or e-mail   K6DC@AOL.COM

Date: Fri, 21 Nov 1997 00:45:54 -0500
From: "ROBERT W DOWNS, WA5CAB" <RWDowns_WA5CAB@compuserve.com>
To: "INTERNET:boatanchors@theporch.com" <boatanchors@theporch.com>
Subject: Re: AM VS DSB
Message-ID: <199711210046_MC2-28F7-6E7@compuserve.com>

Group,

As a further comment to Mike Hanz's comments, were not for the Collins
mechanical filter, Single Sideband Supressed Carrier would most likely ha=
ve
remained a curiousity except for high power (> 10KW) point to point
circuits (used fairly extensively during WW-II) and experimenters (I.e.,
hams). Phasing type exciters aren't something that you'd want to put on
some guy's (or gal's) back and have him run across a rice paddy while oth=
er
guys (or gals) were shooting at him/her.

DSBSC has one other possible advantage over SSBSC besides simplicity. =

Frequency diversity is possible with only one transmitter and antenna at
the transmitting end and one receiver at the receiving end.

73, Robert W. Downs, WA5CAB
RWDowns_WA5CAB@compuserve.com
Houston, TX

Date: Fri, 21 Nov 1997 01:29:48 +0100
From: Hannelore Breuer <hbreuer@metronet.de>
To: BOATANCHORS@LISTSERV.TEMPE.GOV
Cc: boatanchors@theporch.com
Subject: Any BAs in Las Vegas?
Message-ID: <347524E1.33B6@metronet.de>

Hi BA folks,

I am in Las Vegas for the COMDEX and wonder if there
is any BA related store which is worth a visit?
Thanks for any suggestions.

73
Heinz - KF6FNC

Date: Thu, 20 Nov 1997 22:47:14 -0800 (PST)
From: Dick Dillman <ddillman@igc.apc.org>
To: boatanchors@theporch.com
Cc: bmosca@backfire.com, gmurphy@igc.org
Subject: Serious Code Practice

Message-ID: <2.2.16.19971120224632.45e79eb6@pop.igc.org>

Greetings, fellow enthusiasts.

I recently returned from a business trip to find a code practice oscillator waiting for me. When I say that the unit was big enough to block the entrance to my office you will know that this is a code practice oscillator of consequence!

What we got here is a black painted box maybe the size of a HRO-50 with a couple of knobs and switches, several fuses under a trap door, two binding posts labeled KEY and a big magnifying lens smack in the middle of the panel behind which lurks a neon lamp for flasher practice. Above that is a tinny little speaker with an adjustment screw so you can make it sound even more tinny. And a funny thing that looked like an AC socket below.

Naturally I did what any good radio wacko does and opened the thing up at the first opportunity. The insides looked good even if the line cord entry and filter arrangement was a bit weird. Then I noticed two familiar cans. Vibrators. A 6V vibrator and a 115V vibrator! I don't think I've ever seen a 115V vibrator before. The schematic pasted inside the case soon revealed all and made sense of the "AC socket" on the panel. The socket is actually a switch allowing you to select the input voltage. This baby will run on 6, 12, 24 and 115VDC and 115 and 240VAC! What's up with that? I mean, did they have a lot of whining PFCs saying "We'd love to practice code, Sarge, but gee, there's no AC power here in the foxhole." If so, this baby fixed that problem. All they had to do is run a line over to a nearby bombed out Jeep.

Anyway, this thing will let you practice some serious CODE, Jack! The AN/SGC-T1 Code Training Set, vintage 1945, has a 6G6 oscillator, 6G6 amplifier and a 6X5 doing you know what. Man, there's just no such thing as halfway measures in the US military. Makes me proud.

73,

Dick

Dick Dillman
<ddillman@igc.apc.org>
WPE2VT W6AWO
Collector Of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

Date: Fri, 21 Nov 1997 00:54:39 -0600 (CST)
From: arc5@ix.netcom.com
To: boatanchors@sco.theporch.com
Subject: EIMAC POWER AMP TUBE MANUALS on Ebay
Message-ID: <19971121054662306@>

EIMAC POWER AMPLIFIER TUBE MANUALS
for auction on ebay.
Two large volumes in excellent condition.
Also includes 1964 and 1971 Quick Reference Catalogs.

http://komodo.ebay2.com/aw-cgi/eBayISAPI.dll?ViewItem&item=2239944

End of BOATANCHORS Digest 1786
****

>From ???@??? Sat Nov 22 10:26:10 1997
Message-Id: <199711212344.RAA20828@sco.theporch.com>
Date: Fri, 21 Nov 1997 17:44:04 CST
Subject: BOATANCHORS digest 1787

BOATANCHORS Digest 1787

Topics covered in this issue include:

1) Re. UPM-84 spectrum analyzer
   by "Thomas A. Adams" <103360.2133@compuserve.com>
2) Manuals For Postage
   by ARONGV@aol.com
3) Extremely Sad News
   by Tom Norris <badger@telalink.net>
4) Re: R-390 Harness help!
   by Dexter Francis <cwest@xmission.com>
5) F.S. GOLDDUST TWINS AND DESK KW
   by Dan Arney <kn6di@groupone.net>
6) Knight T-50 xmtr
   by Nick England <nick@cs.unc.edu>
7) Dallas freeway sale????
   by Dan Arney <kn6di@groupone.net>
8) AM VS. DSB
   by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
9) FS/FT:tubes
   by Ethan Emeson <ethan@olywa.net>

10) WTB 3-1000Z
by "David L. Thompson" <thompson@mindspring.com>
11) Re: Cleanup Suggestions Needed
by Doug Gordon <dmgordon@pacbell.net>
12) Re: AM VS. DSB
by John Kolb <jlkolb@cts.com>
13) Cleaning Aluminium ??
by BEN NOCK <G4BXD@compuserve.com>
14) The Mouse Piss Tragedy
by "W6WUH Larry" <rau@wco.com>
15) RE: AM Repeaters
by "Ornitz, Barry L" <ornitz@eastman.com>
16) BOUNCY METERS & HANG AGC
by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
17) AM REPEATERS
by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
18) Re: freq conversion of CB rigs
by "W6WUH Larry" <rau@wco.com>
19) Hammarlund Pro-310
by Sandra L Knepper <slkst29+@pitt.edu>
20) Re: Hammarlund Pro-310
by Ken Gordon <keng@uidaho.edu>
21) Cleaning Out Mouse Mess
by arc5@ix.netcom.com
22) Rats in The NC-138D
by "Allan Fritsche" <fritsche@classic.msn.com>
23) Re: HANG AGC
by Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>

Date: Fri, 21 Nov 1997 03:52:54 -0500
From: "Thomas A. Adams" <103360.2133@compuserve.com>
To: "INTERNET:boatanchors@theporch.com" <boatanchors@theporch.com>
Subject: Re. UPM-84 spectrum analyzer
Message-ID: <199711210353_MC2-28FC-AAE6@compuserve.com>

To the person considering buying a UPM-84; Don't bother.

I had one of these critters, but I was lucky; I didn't have to pay Fair Radio's prices. I found one for $40 at a sale of old lab equipment at a university.

VERY, VERY HEAVY (and that's from a guy who thinks nothing of hoisting R-390As around). The unit will come in handy tho if your BA collection happens to include the USS Iowa, and it came sans anchor; just put a few fanthoms of chain on one of the handles, and this thing will make a dandy replacement.

Not very good performance, with poor image rejection, and a lot of "phantom" blips from stray mixing products. It's fun to turn the dial and watch pips slide across the screen in BOTH directions at once! This is considered NORMAL operation.

The klystron in the critter's front end is gonna be fun to find if you need a replacement. The manual is a MUST!!! Ditto the accessory kit; take it from one who had to improvise.

Not terribly accurate; this thing is a first generation tube beast. Reminds me of a tube type HP scope, but MUCH heavier, and produces more heat.

Best thing about it; it will yield some EXCELLENT parts when you finally get disgusted and scrap it, including several coax relays with BNC connectors.

Forty bucks is about right. Anything more is a very bad joke.

The most fun I had with it was when I took it to a hamfest (I got back what I'd paid for it), and watched the poor suck... er, um... proud new owner try to lift this monster into his car! It would give King Kong a hernia, easily in the 150 - 200 pound category, not including accessory kit and transit case.

It's an excellent example of the old military axiom of "if it's got handles on it, then it MUST be portable equipment".

Could be, but a BC-610 has handles too; does that make it equivalent to a BC-611???

73's,

Tom, K9TA

Date: Fri, 21 Nov 1997 05:35:51 -0500 (EST)
From: ARONGV@aol.com
To: boatanchors@theporch.com
Subject: Manuals For Postage
Message-ID: <971121053550_2118703068@mrin42.mail.aol.com>

Hi Gang:

On Monday, November 24, I'll be listing my first of the "Manuals For Postage" of the holiday season. Be sure to read the rules.

Also, as mentioned in an earlier post, I will include a few more very restorable rigs also "for postage" only. Among that stuff will be a couple of Globe Scout Deluxe rigs, and a couple of shipable, restorable receivers. The Scout 680A and DX-60 are already gone to new homes.

Meanwhile, can anyone help me locate a nice, working Hammarlund HX-50A transmitter?

73s & Good Hunting!

Ron W0OIZ Kansas City

Date: Fri, 21 Nov 1997 06:45:41 -0600
From: Tom Norris <badger@telalink.net>
To: (Recipient list suppressed)
Subject: Extremely Sad News
Message-ID: <3.0.3.32.19971121064541.00739f78@telalink.net>

Right way, Wrong way, Navy way?

===

Navy's Technical Records of 20th Century Destroyed

Associated Press, Washington - Naval Research Laboratory records that "chronicle some of the most significant technical achievements in the 20th century" were inadvertently destroyed by the National Archives.

They were "pulped beyond recognition," the archives said Wednesday. The archives and the Navy blamed each other.

Fed into the pulper sometime last summer were 4,200 scientific notebooks and 600 boxes of correspondence and technical memos.

"The historical record of our nation's scientific and technological heritage has suffered a serious and irreperable loss," Read Adm. Paul G. Gaffney II, chief of Naval Research, wrote National Archivist John Carlin, protesting the destruction of the records.

Among the lost records, Gaffney said, were the correspondence of American pioneers in high-frequency radio, work of the inventors of radar "and the war records or the application of these technologies in the campaigns against Nazi Germany and Japan."

Also lost were records of "path-breaking acoustic and oceanographic research" and materials tracing the early history of the American space program with V-2 and Viking rockets, records of Vanguard, the first U.S. satellite program, "and much more," Gaffney said.

==

Date: Fri, 21 Nov 1997 06:00:48 -0700
From: Dexter Francis <cwest@xmission.com>
To: boatanchors@theporch.com
Subject: Re: R-390 Harness help!
Message-ID: <347585FE.79DB@xmission.com>

Greetings all -

I only have three "loose ends" to tie up in the great R-390 fix it contest:

All three wires break out of the harness in the power supply bay. The first two break out where the harness does the 180 degree turnback, just before fanning out onto the fuse holders/barrier strip. The third one breaks out where the harness passes from PTO bay into the power supply bay.

Contestant #1 is 18 guage, white with a narrow brown stripe.
Contestant #1 is 18 guage, white with a narrow orange stripe.
Contestant #1 is 18 guage, white with a red *and* an orange stripe.

Please help me connect these wandering ones to their former homes.
(Translation: Where the heck do these need to be soldered to?)

Many thanks in advance.

-df

Visit our Web site at http://www.xmission.com/~cwest/
  e-mail to: tubes@usa.net -or- cwest@xmission.com
    (P.O. Box 22443, Salt Lake City, Utah 84122)

Date: Fri, 21 Nov 1997 05:34:29 -0800
From: Dan Arney <kn6di@groupone.net>
To: boatanchors@theporch.com
Subject: F.S. GOLDDUST TWINS AND DESK KW
Message-ID: <34758DE4.74E36D36@groupone.net>

Collins 75A4 with original manual/speaker-3 filters-MINT CONDITION SN over 5500. KWS-1 earlier SN,all original in outstanding condition,original manuals-relay-and air assembly. SOLD AS A PACKAGE ONLY. This set is collector type quality Best CASH offer. Buyer arranges pick-up or crating shipping. No looky lous or tire kickers.

Johnson desk KW right hand desk. Late SN, all original in outstanding condition and fully operational,This is a beautiful rig. prefer pick-up. Buyer arranges and pays for crating/shipping. BEST CASH OFFER.

Tower: TRI-EX Sky needle with factory built custom top assembly for prop pitch. Includes prop pitch bearings and 24ft 2 1/2" chromoly mast. Fully extendedapproximately 115 feet. No base or work platform Best reasonable offer. Currently standing. Buyer pays for dismantling and shipping.

ANTENNAS: (buyer pays shipping)or pick up.
TELREX 10el 10 meter $750.00
8 el 15 meter $750.00
3 el 40 meter $900.00 29' boom full size
11 el 6 meter $450.00
The above equipment is in the LA area .
NO LOOKY LOOS-TIRE KICKERS OR FRUGAL This is for serious qualified buyers only.
Will take offers until Nov.25 -97 0200 UTC
Can furnish photos for serious buyers. Can arrange on-air demo of units if qualified.
If you are not into buying top of the line units please do not respond.
The first two items are Collector quality and offers should reflect that.
We can arrange overseas shipping.
Thanks,
Hank KN6DI
73's

Date: Fri, 21 Nov 1997 09:31:31 -0500 (EST)
From: Nick England <nick@cs.unc.edu>
To: boatanchors@theporch.com
Subject: Knight T-50 xmtr
Message-ID: <199711211431.JAA10184@altair.cs.unc.edu>

Several times I have seen the question come up as to whether the "Knight 50 watt transmitter" was ever really called a T-50 or if that was just a popular name. The 1961 Allied catalog indeed calls it a T-50. Same part number, etc. as the "Knight 50 watt transmitter" in previous catalogs.

Just what you always wanted to know.
More trivia from a Knight nut,
73 & Have Fun,
Nick England KD4CPL nick@cs.unc.edu   Univ. Of North Carolina
http://www.cs.unc.edu/~nick   Chapel Hill NC

Date: Fri, 21 Nov 1997 06:58:19 -0800
From: Dan Arney <kn6di@groupone.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Dallas freeway sale????
Message-ID: <3475A18A.4D6879A7@groupone.net>

I will be in Dallas early AM 11-22-97. Is the under freeway swap on this Sat.???
Thanks, Hank KN6DI

Date: Fri, 21 Nov 1997 11:17:57 -0500 (EST)
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
To: boatanchors@theporch.com
Subject: AM VS. DSB
Message-ID: <9711211117.aa27162@pcusa01.ecunet.org>

To: boatanchors@theporch.com

One reason to use DSB is that it's a form of spread spectrum modulation.

Using the right kind of receiver (phase locked, not available), you gain some immunity from QRM.

Costas (of G.E.) wrote about this many times in the mid 1950's. It is still impractical (costly) to build such a receiver for amateur use though.

-John Sehring (Thu, Nov 20, 1997 2:31 pm MT @Baker, Montana) UCC WB2EQG

Date: Fri, 21 Nov 1997 09:17:49 -0800

From: Ethan Emeson <ethan@olywa.net>
To: BA list <boatanchors@theporch.com>
Subject: FS/FT:tubes
Message-ID: <3475C23D.37F1826F@olywa.net>

Tubes for sale, or perhaps you can help me with
some types I'm looking for?
NOS tubes unless otherwise noted.
+ $3 for USPS priority mail (assuming under 2LBS) + insurance
($0.75 if under $50).

6G5/6U5,	2@$22 each
used/tested 6G5/6U5,	2@$11 each

30KD6/japan	1@$14
36KD6-40KD6	1@$12
40KG6A	1@$8
80 (ST)	$11
80 (straight)	$6

5U4G, used/tested	$5
6AU8A	$2
6DJ8	$3
6GH8A	$1.50
6KN6	1@$5
12AV7	$2.50

Date: Fri, 21 Nov 1997 13:08:11 -0500 (EST)
From: "David L. Thompson" <thompson@mindspring.com>
To: boatanchors@sco.theporch.com
Subject: WTB 3-1000Z
Message-ID: <1.5.4.16.19971121140859.380f522c@pop.mindspring.com>

Gang,

I have a friend who is in need of a 3-1000Z. If you have one
send an e-mail to:

Rick Dougherty NQ4I <NQ4I@compuserve.com>

Please don't e-mail to me.

Dave K4JRB

Date: Fri, 21 Nov 1997 10:29:56 -0800
From: Doug Gordon <dmgordon@pacbell.net>
To: ARONGV@aol.com
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Cleanup Suggestions Needed
Message-ID: <3475D324.23E1@pacbell.net>

ARONGV@aol.com wrote:

> Hi Gang:
>
> .. I have a Globe Scout 680A that's
> working but in serious need of TLC (panel great, cabinet bad). Anybody
> interested, you can have it but it's heavy so I need $15-$20 to ship..

Hi Ron,

I have a 680A thats fair with non-original Xfrmr and bad panel. If your xfrmr is good and original and panel and knobs are OK I think I could get one good one, maybe.. :-) What say?? regret to say I haven't found a solution to your mouse problem. Have a Globe King where mice did same to chasis but also ate the insulation off transformers (wax and all right down to the wire). What a beauty.
:-/
73, Doug K6AKK
ZIP 92008

Date: Fri, 21 Nov 1997 11:20:07 -0800 (PST)
From: John Kolb <jlkolb@cts.com>
To: JOHN SEHRING <JOHN_SEHRING.parti@ecunet.org>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: AM VS. DSB
Message-ID: <Pine.SCO.3.91.971121110950.18849A-100000@sd.cts.com>

On Fri, 21 Nov 1997, JOHN SEHRING wrote:

> Costas (of G.E.) wrote about this many times in the mid 1950's. It is
> still impractical (costly) to build such a receiver for amateur use though.

This isn't the place to debate how easily this could be done with so**d st**e, but a number of top end receivers have synchronous detectors now. An article, which I can't find at the moment, by Webb, of GE, (Dec '58, CQ) did it with 6 or 8 tubes, which would have doubled the cost of a receiver at that time.

GE prototyped a direct conversion, synchronous detection receiver,
the FRR-48, (page 117 of Moore's 3rd ed. "Communications Receivers"),
designed mainly for DSB. I expect Costas was directly involved in
the design. I had one once, one of only three ever made, I was told.
It was beyond my abilities to get working, so sold or junked it.
Still have the main tuning knob :)

John Kolb KK6IL jlkolb@cts.com

Date: Fri, 21 Nov 1997 14:32:53 -0500
From: BEN NOCK <G4BXD@compuserve.com>
To: Multiple recipients of l <boatanchors@sco.theporch.com>
Subject: Cleaning Aluminium ??
Message-ID: <199711211433_MC2-2910-933F@compuserve.com>

Hi all.

Re the BC-148 I acquired. I need to clean up the aluminium =

that is used around the sides of the set box. I guess brushing
with wire wool etc will remove most of the flakes and "rust"
but is there anything that can be used to "treat" it ?

We have some stuff in the UK that is great on steel. If its rusty
as hell, paint this stuff on and it goes dark blue/ near black and =

looks fine, a real box saver. I was just wondering if theres any
such treatment for aluminium over there.

cheers, Ben G4BXD.

Date: Fri, 21 Nov 1997 11:37:22 -0800
From: "W6WUH Larry" <rau@wco.com>
To: <ARONGV@aol.com>
Cc: "boatanchors" <boatanchors@theporch.com>
Subject: The Mouse Piss Tragedy
Message-ID: <199711211939.LAA16573@shell.wco.com>

well.. count me as number 6,321 who would like to own the scout...is
California to far to ship ?

I had mice build a nest in my English Sig Gen one winter.. and man it's power supply was never the same... lots of warm soapy water.. lots of fresh water rinses... and a thorough drying with a 60 watt lamp in a metal reflector.

the piss is both conductive and corrosive (salts).. and in the case of my sig gen power supply.. i think it got into the power transformer insulation and windings ..end of transformer!

t
This requires the most drastic cleaning measures of any BA problem I know of....including an attempt to wash the component side of the chasis...at least the tube sockets.. and throughly rinse them...old tooth brushes and q-tips and rags scooted with screwdrivers are the standby's here...

more gentle heat lamp...just a regular bulb not one of the red heat lamp monsters for this job.

As has been pointed out here before...paper caps and most electrolyitics will be dameged by the application of the water, soap and possbily sovents like achohol or even HCF you may have to use.
But that was comming anyway.

Depending on what the mouse piss got into... you may have to replace pots...pray your coils are not eaten up.

This is as bad as it gets in my opinion....

You were right to resist any temptation to apply power to this thing until it has been throughly cleaned
(probably repeatedly),well rinsed, and very well dried.

Since Uric acid is probably the main culprit here.. any body have any thoughts on trying to netralize it ?

My fear is that something like soda would also cause more of the same problems and totallydestroy a radio .

Good Luck !

Larry W6WUH
rau@wco.com

Date: Fri, 21 Nov 1997 15:14:50 -0500
From: "Ornitz, Barry L" <ornitz@eastman.com>
To: "'MRogers726@aol.com'" <MRogers726@aol.com>,
"'boatanchors@sco.theporch.com'" <boatanchors@sco.theporch.com>
Cc: "'ornitz@tricon.net'" <ornitz@tricon.net>
Subject: RE: AM Repeaters
Message-ID: <c=US%a=_%p=Eastman%l=NTD150-971121201450Z-23510@ntd150.kpt.emn.com>

Let's look at the situation from the remote user through the repeater and back to another user.

User 1 has a modified CB radio, for example, that transmits FM and receives AM. User 2 has the same thing. The repeater has the opposite combination, an FM receiver and an AM transmitter.

1) User 1 transmits his signal to the repeater in FM.
2) Receiver at repeater receives this FM and converts it to audio.
3) Transmitter at repeater takes this audio and modulates its AM transmitter.
4) User 2 receives the signal from the repeater in AM which is received by his receiver.

To reply the opposite situation occurs.

1) User 2 transmits his reply to the repeater in FM.
2) Receiver at repeater receives this FM, converting it to audio.
3) Transmitter at repeater transmits this information back out on AM.
4) User 1 receives his reply in AM from the repeater.

All the transmitters can run Class C - which is what the converted CB's were anyway.

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

BTW, surplus 7 GHz telephone equipment often shows up at the Shelby hamfest. I have never seen it priced more than about $10 to $20 as it is not very useful to the average ham. I do not believe it is possible to drop it to the 5.7 GHz ham band or raise it to the 10 GHz ham band.

>-----Original Message-----
>From: MRogers726@aol.com [SMTP:MRogers726@aol.com]
>Sent: Friday, November 21, 1997 3:23 AM
>To: ornitz@eastman.com
>Cc: boatanchors@theporch.com
>Subject: Re: AM Repeaters
>

>I'm confused: wouldn't you have to run some liniar output rather than class C
>in your FM rig??
>BTW if anyone is interested I have two each Collins 7Ghz transmitters and
>receivers For $150.oo Michael

Date: Fri, 21 Nov 1997 16:30:08 -0500 (EST)
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
To: boatanchors@theporch.com
Subject: BOUNCY METERS & HANG AGC
Message-ID: <9711211630.aa22369@pcusa01.ecunet.org>

To: boatanchors@theporch.com

> For reasons I've never understood, hang AGC circuits are not very
> common. I think they're greatly to be preferred, but the circuit
> complexity is greater and they're more expensive to implement.

Yes, they make SSB reception so nice. However, they can also most easily hang up on just one noise pulse or one burst of adjacent frequency QRM unless they are very sophisticated. Plessey made a very elaborate hand AGC ct on an IC chip.

The first well-known SSB hang AGC circuit appeared around 1956-57 in QST (& 1st ARRL SSB Handbook), by Luick. Interestingly, it was driven by *audio* rather than *rf* energy.

This may have been done to keep BFO energy out of the AGC ct, this was the days before product detectors & the BFO to signal voltage ratio has to be kept very high for an envelope detector to have a chance at low distortion SSB or CW detection. BFO energy could easily sneak into the detector/AGC rectifier cts. and pump them up.

I have read that an audio-derived AGC ct can never have sufficiently fast attack. It is true that the detected SSB waveform (audio) is not the same as the undetected SSB waveform (rf) so that may be part of the reason. Also, there is may be too much post-detection, audio frequency rolloff, distorting (softening) the passage of fast transients at the leading edge of an SSB waveform.

I'd be interested to hear other thoughts. I believe that Pappenfus says something about this in his classic SSB handbook, which I don't have.

> If your S-meter is bouncing around, then it probably signifies a
> defective meter which has somehow lost its internal damping. Sorry.

What is internal meter damping & how is it lost?

I'm no meter (or motor, a meter is just a motor) expert but I'm not aware of any significant *mechanical* damping mechanism in meters. The interaction of the magnet, moving coil & back EMF does some damping I believe. There is very, very little friction in meter bearings, to avoid hysteresis so it's probably not that.

I do some sensitive microammeters that were also very bouncey. It turned out that they *needed* an external parallel resistance to become properly mechanically damped. Using an adjustable pot as a shunt and applying a step electrical input to the meter, I could clearly see the effects of under, critical and over damping.

E.g. underdamped overshoots the mark & oscillates before settling down. Overdamped doesn't overshoot but takes longer than necessary to get to the mark. Critically damped gets to where it's going as quickly as possible with no overshoot.

This is analogous to classic electrical LCR (or mechanical mass, compliance, damping) circuit behavior.

The 50 uA meter I played with needed about 20K shunt resistance to be critically damped. Yes, the shunt did affect the accuracy of the meter slightly, but it was being used in as a relative indicator (S-meter) so that didn't matter. In fact, it may have actually made it read correctly but I never checked.

-John Sehring (Fri, Nov 21, 1997 1:25 pm MT @Baker, Montana) UCC WB2EQG

Date: Fri, 21 Nov 1997 16:30:09 -0500 (EST)
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
To: boatanchors@theporch.com
Subject: AM REPEATERS
Message-ID: <9711211630.aa22393@pcusa01.ecunet.org>

Barry Ornitz wrote:

> John Sehring, WB2EQG, wrote about 10M AM repeaters and mentioned the 29.53/29.63 machine of WB4AFP & N4JK.

> No duplexers were used. Instead the receivers were located remotely from the transmitter with a 440 link carrying the audio.

Not surprising, ever see the size of a 29 MHz duplexer?!

> The idea behind this repeater was the availability of inexpensive CB

> rigs. It is pretty trivial to convert an AM transmitter to a FM transmitter. In the HyGain CB radios of the time, the modulator was disconnected from the final transistor and audio from the modulators driver stage was applied to a varactor diode across one of the crystal oscillators.

I worked with the Grandaddies of the CB to 10m FM craze, Howard Knickerbocker, K1DCS, et al, in CT in 1978-79. I also wrote numerous articles on this for 73 magazine in same time frame.

Actually, using the HyGain CB boards that had the famous PLL02A chip (the basis for the K1DCS conversion), low level audio was injected right into the PLL loop, at the varactor that controlled the VCO. It worked very well. Many VHF FM ham rigs do this also.

> Similar modifications can be done to virtually any vacuum tube AM rig.

Only if you could FM the VFO (or some other oscillator), which I did & also described in 73 for FM'ing the Hammarlund HX-50. It had a varactor ct. already in the VFO tank for other purposes. Actually, you could use any of the early techniques for RTTY'ing which did the same sort of delta freq thing in the VFO.

> Receiving FM, however, was much more difficult, at least in those days. Modern integrated circuit chips have made the job easy today, but in keeping with the Boatanchor spirit, a limiter stage and Foster-Seely discriminator would be needed to add to the typical boatanchor receiver to receive FM.

K1DCS design used a $1 TV-sound IC chip (limiters, quadrature detector, noise-operated squelch) to do this right on the CB board. Worked well.

> So Art and Dave made life easy on the local hams. The only FM receivers required were those serving the repeater (they used multiple receivers and signal-strength voting). The repeater transmitter was AM so it could be cheaply received by the converted CB receivers, or any other AM receiver.

Nice set up with voting selection. But works even better if FM quieting is used.

> In areas where there is sufficient 6M AM activity, such a repeater would be ideal. You would gain most of the benefits of FM on the uplink, yet because the repeater output is generally high-powered at a good site, a good, clean AM transmitter would give wonderful results on the downlink.

Wierd but good.

> With the transmitter being AM, and the repeater receiver FM, some of
> the problems with duplexers and such might be simplified.

As I sit here, I can't think of how this might be true... Hmmmm, the far-out spectrum of an AM transmitter is cleaner than an FM transitter (Bessel functions & all that explain it)... Please tell me more!

I'd be interested in more rememberances of operating AM repeaters, the first kind used by hams.

-John Sehring (Fri, Nov 21, 1997 1:48 pm MT @Baker, Montana) UCC WB2EQG

Date: Fri, 21 Nov 1997 14:27:47 -0800
From: "W6WUH Larry" <rau@wco.com>
To: <tony@bright.net>
Cc: "boatanchors" <boatanchors@theporch.com>
Subject: Re: freq conversion of CB rigs
Message-ID: <199711212228.OAA14453@shell.wco.com>

sorry my brain is mush todya.. sick as a dog...

Is there a generic method of CB radio conversion ? :

Well I think the basic deviding line is between early xtal controlled CB radios on the one hand ... most but not all of the tube type CB rigs.. (in these you get 3 rd overtone xtals for 10 m and retune the rig to 10 m .. end of story.)

and synthesized radios on the other.. of which there are two basic types.. xtal synthesis and digital synthesis...the first is a crystal mixing scheme and the basic deal is to change one mixing crystal to move up into the 10m band.. retaining the same oddball chanel spacings as on 11m. Again retuning the driver ,P.A. , and front end of the radio to 10 m.

Digital synthisis is beyond the scope of my atrophied brain. There are books designed for illegal CB'er types that tell you how to "open up" the digital frequency synthesizer in many specific radios.. and ILLEGAL add on kits for doing this also..

Frankly if I knew how to do this I wouldn't print it or have one in my shop as long as i have my Commercial ticket, ham license or bicycle license.

There have been articles published.. in QST i think about 10 years ago..the Sears Road Talker SSB CB radio was a popular item for ham conversion before the advent of ham rice boxes for 10m like the unidens and Radio

Shacks...sand boxes a side....

Some of the best tube type CB radios...with frame grid front ends and nuvistor mixers in the recievers were hot stuff...as good or better than anything made since for 11m... and are fine candidates for 10 m conversions... with out guilt sez I.

Among these are top of the line radios made by Polycom, Courier, and others... things to look for are

:* 6BQ5 modulator tube(s) (not 6AQ5) some even had PP 6BQ5's!...

* a separte mod tranformer instead of the choke modulation scheme which uses the plate coil of the out put transformer as the mod choke in a heising scheme .

* Nuvistor mixer or front end in the reciever

* Rugged power supply...the wattage on the label usually is a good clue to the output and mudulation   capability of the radio and its power supply

* Final tube capable of more than a couple of watts output

* Panel mounted PA loading.. this only existy in the Polycom Pro and Regency Rain Gain to my   knowlege.. but i dont know anything about the tram and siltronix radios which were essentiall intended for illegal use anyway.

There is a Series of Sam's Paperback manuals the CB Series.. which will allow you to compare circuit details of the tube CB radios and also see underchassis photos of the wiring... an there-in lies a whole 'nuther tale.

Larry W6WUH

Date: Fri, 21 Nov 1997 17:33:40 -0500 (EST)
From: Sandra L Knepper <slkst29+@pitt.edu>
To: boatanchors@theporch.com
Subject: Hammarlund Pro-310
Message-ID: <Pine.GSO.3.96L.971121172358.29849A-100000@unixs3.cis.pitt.edu>

The Pro-310 (serial number 651) that I asked about in an earlier post as to what I should pay etc. is now resting comfortably in my hamshack. The former owner bought in new in 1957 from a radio store in Johnstown, PA., which is no longer in business.

The set is immaculate and plays very well. It is gray wrinkle finish. Original manual and box were included.

Would those who own a Pro-310 indicate to me what your serial number is. I was told that Hammarlund manufactured only 1,000 of these units.

Now if I could just find an SX-88 in similar condition.

I am appreciative to those who urged me to buy the set for $350.

Thank you.

Dave, W3BJZ
Publisher of the Collins Journal

Date: Fri, 21 Nov 1997 14:48:43 -0800 (PST)
From: Ken Gordon <keng@uidaho.edu>
To: Sandra L Knepper <slkst29+@pitt.edu>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Hammarlund Pro-310
Message-ID: <Pine.BSF.3.95.971121144729.3112D-100000@piobaire.mines.uidaho.edu>

> Now if I could just find an SX-88 in similar condition.

You want TWO deals like that in a lifetime? Boy, you don't want much do you? :-)

>
> I am appreciative to those who urged me to buy the set for $350.
>

You're welcome...and I am envious.

Ken W7EKB

Date: Fri, 21 Nov 1997 17:17:12 -0600 (CST)
From: arc5@ix.netcom.com
To: boatanchors@sco.theporch.com
Subject: Cleaning Out Mouse Mess
Message-ID: <19971121171642663340@>

I spent alot of years working on radios in the Nevada
desert. There are more field mice in an acre of seemingly
arid, lifeless desert then fleas on a Texas hound! And
they L-O-V-E nesting in nice warm radios. They also
pee and poop every time their nasty little black hearts beat.

The only thing we found that would cut the old, dried urine
was a strong solution of ammonia, followed by water
rinsing and LOTS of time to dry completely. Nothing from
alcohol to carbon tet derivatives would dissolve that mouse mess,
but ammonia did the job.

One BIG warning:

DO NOT USE COMPRESSED AIR OR A DRY BRUSH TO CLEAN UP MOUSE MESS!!!

You are taking you life in your hands
and the life of anyone who breaths the dust!
Hanta virus (and other diseases) in mouse droppings is no joke.
Just because you might live east of Old Man River
doesn't mean it can't be there. It was in Texas last year.
I got a very mild case after working for 5 minutes in a
mouse-messed trailer in Nevada and I darn near died.
It's like the worst, big-ugly Boogieman flu
you ever had, plus coughing your lungs raw.

Spray the droppings with Lysol(tm) or some other disinfectant first!
Don't use bleach if you're going to immediatly follow with ammonia,
unless you like breathing chlorine gas.
Let the disinfectant sit on the mouse mess for
at least 15 minutes. Rinse with water.
Then use a soft brush and the ammonia to scrub
the crap out of it...(heh heh).

Good Luck,

73 DE Dave Stinson AB5S
arc5@ix.netcom.com

Date: Fri, 21 Nov 97 23:16:27 UT
From: "Allan Fritsche" <fritsche@classic.msn.com>
To: boatanchors@theporch.com
Subject: Rats in The NC-138D
Message-ID: <UPMAIL03.199711212316420910@classic.msn.com>

Hey Ronnie, just cover up the upper IF and RF cans and any open coil forms with a little peice of masking tape, Don't worry about the Tunning caps. Set the little guy on the driveway and spray with Windex thouroughly. Let set for about a half hour and then blast with a garden house..
I have done this about 20 times on 20 different rx's and the only one that I had a problem with was the lowly R-100A, lost the audio transformer.

Works great in the hot Houston sun, but your mileage may vary.

Good Luck My Friend
Al
fritsche@classic.msn.com
KD5CML

Date: Fri, 21 Nov 1997 19:46:22 -0400
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
To: boatanchors@theporch.com
Subject: Re: HANG AGC
Message-ID: <v03102818b09bc0a9f321@[134.53.65.12]>

> -John Sehring WB2EQG writes:

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>hang up on just one noise pulse or one burst of adjacent frequency QRM
>unless they are very sophisticated. Plessey made a very elaborate hang AGC
>ct on an IC chip.

Hi John and the Gang,

I am amazed that anyone remembers the Plessey SL-621 AGC generator. In my opinion, it is one of the most remarkable and sophisticated AGC circuits ever designed, and although the design was implemented as an integrated circuit (circa 1969), the concepts are sufficiently unique and so representative of a late-sixties way of thinking that I think it warrants discussion on the List.

First a bit of background. Plessey Microelectronics is a British company, based in Swindon, Wiltshire. Although I've lost track of the company in recent decades, Plessey specialized in highly original and imaginative linear circuits aimed at the communications industry. I found out about the company when I spent a year as a postdoctoral fellow at Cambridge University in 1969, and first read about the SL-621 AGC generator in "Wireless World," a wonderful British magazine aimed at hams and experimenters. The design so amazed me that I undertook a two year project to design and construct a fairly elaborate receiver which featured the SL-621. This receiver is written up in several editions of the Radio Handbook, edited by Bill Orr, in case anyone is interested in learning more about the circuit. My callsign at the time was W8KFL.

The SL-621 AGC generator is an audio-derived hang AGC circuit., intended primarily for SSB/CW use. It is inserted into a receiver after the product detector, but before the AF amplifier stages, and provides AGC control voltages for the receiver RF and IF amplifiers.

According to the application notes, the SL-621 "generates a suitable AGC voltage directly from the detected audio waveform, provides a 'hold' period to maintain the AGC level during pauses in speech, and is immune to noise interference. In addition it will smoothly follow the fading signals characteristic of H.F. communications. When used in a receiver ..... the SL-621 will maintain the output within a 4dB range for a 110dB range of receiver input signal."

The circuit description of the SL-621 is too complicated to describe here, and requires a circuit diagram to fully appreciate. Basically it works by incorporating two independent detectors into the circuitry, having "short and long rise and fall time constants respectively." The short time constant detector rapidly establishes an AGC level for the receiver, but eventually the long time constant detector output rises and contols the output, since it is the more sensitive of the two. Noise pulses exceeding a nominal level actuate a trigger circuit, which generates voltage pulses whose polarity discharges the capacitors which would normally be charged by the noise impulse. This fact means that noise pulses do not capture the AGC circuit.

The result of the design is that the AGC can control receiver gain at a rate of 20dB/sec. According to the application notes, "the AGC system will smoothly follow signals which are fading at this rate or slower. However, should the reciever input signals fade faster than this, or disappear completely as in pauses in speech, then the the input to the AGC generator will drop below the threshold and the trigger will cease to operate."

I know this description is probably impossible to understand, but trust me that the circuit is amazing. It is highly regretable that the SL-621 is no longer made, because it would be wonderful for (currently popular) direct conversion receivers, which require audio-derived AGC. There are numerous QRP rigs, homebrew and commercial, which would greatly profit from using one.

As John notes, the achilles heel of audio-derived AGC is the rise time (or attack time), which is necessarily slower than for an IF-derived AGC. As a practical matter, I haven't found this to be a problem, except for high speed CW, where a few milliseconds delay tends to cause distortion on the initial dits. The SL-621 probably represents the peak of audio AGC design. I had a couple of spares for my homebrew receiver, but unfortunately lost them in a fire a few years ago. I would love find some more, but it is probably a lost cause.

Incidentally, Plessey also mad the SL-620, which was the basically the same circuit, but intended for use in microphone preamplifiers. It would be just the ticket for providing some volume compression for a speech amplifier, which had noise immunity and outstanding dymamic range.

73,

Jim Garland W8ZR

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End of BOATANCHORS Digest 1787

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